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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 17

Application Number: 08/919,670
Filing Date: August 28, 1997
Appellant(s): AKIZUKI ET AL.

Peter Michaelson
For Appellant

EXAMINER'S ANSWER

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 1-12 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5,963,255	Anderson et al.	4-1996
5,541,656	Kare et al.	7-1996

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1-2, 5, 7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Anderson et al (US5963255).

Regarding claims 1 and 7, Anderson discloses an electronic camera comprising:

a signal processing portion (16; see col. 3, lines 53-60 and col. 4, lines 1-10; also see figure 1) for processing an imaged video signal obtained from an imaging element to form image data;

a monitor (18, see figure 4; also see col. 7, lines 1-5) for displaying the image data;

an electronic flash device (66, see figure 2);

a battery (17, see figure 1; 74, see figure 3) for supplying voltage to the signal processing portion, the monitor and the electronic flash device (see col. 5, lines 29-42);

a battery voltage detector circuit (76, see figure 3; also see col. 5, lines 59-65);

a system controller (17, 20, see figure 1; also see col. 5, lines 54-57); wherein:

the electronic flash device includes a capacitor (see col. 5, lines 10-28) charged when no light is emitted from the flash device (see col. 7, lines 32-34; also see col. 2, lines 11-23 where the bounce effect is discussed), and a discharge tube which receives an output from capacitor and, in response thereto, emits light.

Anderson teaches a method for managing power consumption of the camera known as a "bounce effect." In this method, the camera goes through different "power states (see col. 7, lines 23-46, specifically states 3 and 4)" while maintaining main camera functions- image capture and display. The power states allow for conservation of energy by shutting down various power draining devices such as flash unit. As shown in figures 7A and 7B, the camera is also capable of re-activating these power draining devices at a reduced power charging mode (see col. 8, lines 58-64; also see col. 5, lines 20-28). Thus, since Anderson discloses that the camera may still capture

additional images after the flash unit is shut off, and there is no mention of shutting off power to the display, the Examiner is of the opinion that Anderson's camera would include recording and displaying before charging the flash unit.

In addition Anderson discloses the system controller receives an output from the battery voltage detector circuit, determines whether an amount of electric charge remaining in the battery is below a predetermined value (see col. 7, lines 50-59), and controls displaying on the monitor and charging of the capacitor such that, when the amount of electric charge remaining in the battery is below the predetermined value, display of the image data and charging of the capacitor are not simultaneously performed (see col. 10, lines 29-60) and an operation of displaying the image data on the monitor and recording the image data on a recording medium is completed before an operation of charging the capacitor occurs so that the image data will be preserved on the medium should the battery voltage (see col. 7, lines 1-7 and lines 32-37), as a result of the charging operation, decrease below a level at which the camera would record the image (see col. 8, lines 1-51), wherein the image data is displayed on the monitor after the image has been recorded but before the capacitor has begun charging such that, through display of the image data, a user is informed that the image data had been recorded on the medium (see col. 9, line 62-67 and col. 10, lines 1-18).

Regarding claim 2, see claim 1 above. In addition, Anderson discloses the minimum safe operating level is 5.2 volts and a shut down sequence doesn't occur until the power level falls below the minimum. Thus, charging the capacitor and display could be performed when the power in the battery is at least the predetermined value

(see col. 5, lines 43-48; also see col. 7, lines 23-32 and 40-46; also see col. 8, lines 14-17).

Regarding claim 5, see claim 1 above.

Regarding claim 8, see claim 1 above. In addition, Anderson discloses the minimum safe operating level is 5.2 volts and a shut down sequence doesn't occur until the power level falls below the minimum. Thus, charging the capacitor and display could be performed when the power in the battery is at least the predetermined value (see col. 5, lines 43-48; also see col. 7, lines 23-32 and 40-46; also see col. 8, lines 14-17).

Regarding claim 9, see claims 1 and 3 above.

Regarding claim 10, see claims 1 and 9 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 3-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al.

Regarding claim 3, Anderson fails to specifically disclose the predetermined value is half the value of the full amount of electric charge stored in the battery.

However, the Examiner asserts that Anderson discloses the claimed invention with the exception of this limitation and it appears the invention would work equally as well without specifying the threshold value is half of the battery maximum voltage level.

Regarding claim 4, see claims 3 and 1 above; also see col. 5, lines 45-48 and col. 6, lines 1-5.

Regarding claim 6, Anderson's signal processor (16) contains a memory and digital signal processor. However, it is notoriously well known in the art that a camera system could incorporate two processors (digital and analog) to process image signals as they are output from the imager initially and then digitally process them later for digital transmission or for use in external digital equipment connected to the camera. Therefore, it would have been obvious to one of ordinary skill in the art to incorporate two processors in a camera system to expand the external use of the image signal (digital broadcast, conferencing, recreational image manipulation (photo software) by computers, etc.).

2. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al in view of Kare et al (US5541656).

Regarding claim 11, see claim 1 above. In addition, as discussed above, Anderson discloses preventing complete charging of the capacitor and displaying an image simultaneously when the charge level is below a predetermined value. Kare supports completing the charging of the capacitor before imaging can occur. Thus, both Anderson and Kare disclose preventing charging of the capacitor and displaying an image simultaneously when the charge level is below a predetermined value. They also

teach charging the flash completely before starting the imaging cycle. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to control the monitor to be inoperative while a capacitor is charging after recording image data on a recording medium and reproducing recorded data, since Anderson teaches shutting off the flash to conserve energy when recording and displaying and Kare further illustrates charging and any imaging related function should occur sequentially (one at a time; or one after the other). Therefore, the system would prevent the power source from heavily loaded periods of use which cause the camera system to increase the longevity of the battery/power source usage.

(11) Response to Argument

Regarding Applicant's arguments, on page 20 of the brief, concerning the Anderson patent not disclosing charging the flash unit after recording and displaying images, Examiner respectfully disagrees. Since Anderson discloses that the camera may still capture additional images after the flash unit is shut off (Power State 3), and there is no mention of shutting off power to the display (see col. 7, lines 32-34), the Examiner is of the opinion that Anderson's camera would include recording and displaying before charging the flash unit.

Regarding Applicant's arguments concerning the relevancy of the Kare patent, Examiner notes that Kare was intended to teach that charging and other imaging functions should not occur simultaneously but sequentially (one at a time) which also provides support for the overloading of a battery (see col. 5, lines 42-55).

Regarding Applicant's arguments, on page 13 of the brief, concerning "hindsight" the Examiner respectfully disagrees. The Applicant will appreciate, in Examiner's foregoing rejections, that proper motivation has been established.

Regarding Applicant's arguments, on page 18 of the brief, concerning the Anderson patent only capturing an image after the flash unit is charged, the Examiner respectfully disagrees. Examiner notes in col. 7, lines 32-37 and lines 60-67 and col. 9, line 66 – col. 10, line 3, it is taught that images are still captured when the flash is off and under low light conditions.

Regarding Applicant's arguments, on page 20, paragraphs 2 and 3, of the brief, see Examiner's notes above where it is discussed that the flash capacitor is recharged after an image has been recorded.

Regarding Applicant's arguments, on page 21, paragraph 3, of the brief, see Examiner's notes above where it is discussed that the flash capacitor is recharged after an image has been recorded.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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RNT

April 22, 2002

Conferees

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This is in response to the appeal brief filed February 6, 2002.